

### **REMARKS**

Claims 18-20 and 23-32, 34-35, 36-38 and 40-41 are pending in the present application. Claims 18, 27, 29 and 31 have been amended to define the reducing sugar as rhamnose or fucose. Support for this amendment may be found in the canceled dependent claims 21, 33 and 39. Claim 35 has been further amended to be drawn to a method of treating accelerated aging of the skin. Support for the amendment to claim 35 may be found in originally filed claim 15 and claim 35 of the preliminary amendment of April 27, 2006. Claims 1-17, 21-22, 33 and 39 are cancelled. No new matter has been added by way of the above amendments.

#### **Rejections under 35 U.S.C. §102(b)**

1) Claims 35, 36, 39 and 40 remain rejected under 35 U.S.C. §102(b) as being anticipated by Houlmont et al. The Examiner asserts that the application in the prior art of the composition to the skin would inherently slow the skin's aging, since aging is a natural process that the skin undergoes.

Claim 35 has been amended to further define the aging of the skin as being "A cosmetic treatment method to slow accelerated aging of skin, which is caused by external attacks." Thus, claim 35 has been amended to clarify that the instant invention is directed to a method of treating the aging of skin that is "unnatural", i.e. that has been caused by an external attack on the skin.

The Examiner states that he interprets "reducing sugar monomer whose hydroxyl function is substituted" as including glucose monomers substituted in the anomeric position, as disclosed in Houlmont et al. The Examiner further notes that the "intended" function of the alkylglucoside as an active agent is immaterial to patentability as long as it is present in the composition of the prior art. Houlmont et al. discloses pentyl- and cetyl rhamnoside of the L-form and having the  $\alpha$  and  $\beta$ -anomers. Claim 35 has been further amended to define the reducing sugar monomer as being rhamnose or fucose.

Houlmont et al. fails to teach or suggest a method to slow accelerated aging of skin, which is caused by external attacks or the use of a reducing sugar of rhamnose or fucose as the active agent. As such, Houlmont et al. fails to teach or suggest the instant invention and withdrawal of the rejection is respectfully requested.



2) Claims 18, 19, 21, 23-33 and 35-41 remain rejected under 35 U.S.C. §102(b) as being anticipated by Heiner et al. In maintaining the rejection, the Examiner raises the following points.

a) The Examiner asserts that the compounds of Heiner et al. can be monomers when DP is 1, which would make “DP-1” = 0, i.e. only the substituted residue would be present. The Examiner further asserts that when DP is 1, the resulting monomer would fall within the scope of the present claims.

b) In response to Applicants’ argument that Heiner et al. fails to teach the use of the compositions for anti-aging or anti-inflammatory activity, the Examiner asserts that such activity would inherently take place if the compositions of Heiner et al. were applied to “inflamed or photodamaged” skin.

The present invention is directed to a method for treating inflammatory diseases. It is irrelevant that the compositions of Heiner et al. would inherently be efficacious against inflammatory conditions if the reference fails to teach any application to a person suffering from an inflammatory disease. Applicants note initially that while Heiner et al. does discuss the aging process of the skin and treating photodamaged skin, see e.g. page 1 of the English translation, there is no disclosure in the reference of treating inflammatory diseases. As such, Heiner et al. fails to disclose the invention of claims 18, 19, 21 and 23-30.

In addition, the disclosure of Heiner et al. pertains exclusively to glucose compounds. The claims have been amended to define the reducing sugar monomer as being rhamnose or fucose. As such, Heiner fails to teach or suggest the instantly claimed invention and withdrawal of the rejection is respectfully requested.

### **Rejections under 35 U.S.C. §103**

1) Claims 31-34 have been rejected under 35 U.S.C. § 103 as being obvious over Houlmont et al. The Examiner asserts that one skilled in the art would have been motivated to use the composition of Houlmont et al. on skin that is sensitive, irritated, allergic, etc. because Houlmont et al. teaches that the compositions are well tolerated. Applicants traverse this rejection and withdrawal thereof is respectfully requested.



Enclosed herewith is a Declaration of Dr. Houlmont, who is both an inventor of the instant subject matter and an author of the cited prior art reference. Dr. Houlmont explains in the Declaration that the formulations of Tables IV and V of the Houlmont et al. reference were “primary formulations”, meaning that the formulations only contained a total of 7-8 components including water, compared to a commercialized dermatological formulation, which contains approximately 15 different compounds. Thus, the formulations made in Houlmont et al. were only considered for their cosmetic properties and no consideration as to anti-inflammatory properties was made.

The formulations of Houlmont et al. were constructed to compare a rhamnose-based surfactant to a glucose-based surfactant, which was classically used. The purpose of testing the rhamnose-based surfactant was to reduce the “sugar effect” or stickiness associated with glucose-based surfactants and thereby enhance the comfort associated with using the product. The rhamnose-based surfactant was also evaluated with an aim of reducing the irritation sometimes caused by glucose-based surfactants due to the high content of alcohol residues found in glucose-based surfactants.

In addition, as Dr. Houlmont details, the formulations in the Houlmont et al. reference were only tested on subjects having normal skin. No subjects were evaluated that had sensitive, irritated, intolerant, allergic tending, aged, etc. i.e. intolerant skin.

The present invention, on the other hand, is based on the anti-inflammatory properties of the reducing sugar monomers recited in the claims as identified by the inventors. One skilled in the art, upon reading the disclosure of Houlmont et al. would have only concluded that rhamnose-based surfactants are suitable for cosmetic purposes. The disclosure of Houlmont et al. would not have suggested to the skilled artisan that the rhamnose-based compounds could be used directly to treat skin conditions, such as intolerant skin because a good tolerance of a product by normal skin is not predictive of tolerance by sensitive/intolerant skin. Indeed, it is common that intolerant skins are often reactive to cosmetic products that normal skins tolerate well. As such, the instant invention is not obvious over the disclosure of Houlmont et al. and withdrawal of the rejection is respectfully requested.



2) Claims 20 and 34 have been rejected under 35 U.S.C. § 103 as being obvious over Heiner et al. The Examiner maintains that having an alkoxy radical of 5-12 carbon atoms would be obvious over the disclosure in Heiner et al. of using alkyl substituents of 4-24 carbon atoms. Applicants traverse this rejection and withdrawal thereof is respectfully requested. As discussed above, while Heiner et al. does discuss the aging process of the skin and treating photodamaged skin, see e.g. page 1 of the English translation, there is no disclosure in the reference of treating inflammatory diseases. In addition, the disclosure of Heiner et al. pertains exclusively to glucose compounds. The claims have been amended to define the reducing sugar monomer as being rhamnose or fucose. As such, Heiner fails to teach or suggest the instantly claimed invention of claims 20 and 34 and withdrawal of the rejection is respectfully requested.

In view of the above amendments and Remarks, Applicants believe the pending application is in condition for allowance.

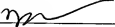
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact MaryAnne Armstrong, Ph.D., Reg. No. 40,069 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.



If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By   
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Attachment: unexecuted Declaration under C.F.R. § 1.132 of Jean-Jacques Houlmont